

substrate (1).

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/015647 A1

(51) International Patent Classification⁷: H01L 33/00, 21/30

(21) International Application Number: PCT/KR2003/001600

(22) International Filing Date: 8 August 2003 (08.08.2003)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PI, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

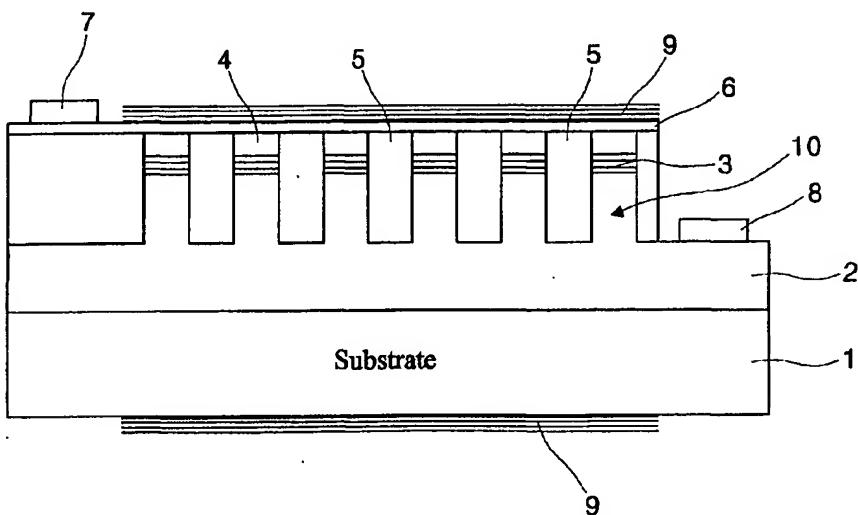
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NITRIDE MICRO LIGHT EMITTING DIODE WITH HIGH BRIGHTNESS AND METHOD OF MANUFACTURING THE SAME



(57) Abstract: The present invention relates to a nitride micro light emitting diode (LED) with high brightness and a method of manufacturing the same. The present invention provides a nitride micro LED with high brightness and a method of manufacturing the same, wherein a plurality of micro-sized luminous pillars 10 are formed in a substrates, a gap filling material such as SiO_2 , Si_3N_4 , DBR($\text{ZrO}_2/\text{SiO}_2$ $\text{HfO}_2/\text{SiO}_2$), polyamide or the like is filled in gaps between the micro-sized luminous pillars, a top surface 11 of the luminous pillar array and the gap filling material is planarized through a CMP processing, and then a transparent electrode 6 having a large area is formed thereon, so that all the luminous pillars can be driven at the same time. In addition, the present invention provides a nitride micro LED with high brightness in which uniformity in formation of electrodes on the micro-sized luminous pillars array is enhanced by employing a flip-chip structure.

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